

GENERAL INDEX TO VOLUME XLIII

New scientific names of plants and the final members of new combinations are printed in bold face type; synonyms and page numbers having reference to figures and plates, in *italics*; and all other matter in ordinary type.

A

Africa, Tropical, Some lichens of, II, *Usnea*, 381
Aldanophyton antiquissimum, 365
Algae, evolution of vascular plants from, 362, 364
Alt, Karen S., Henry N. Andrews and: A new fossil plant from the New Albany shale, with some comments on the origin of land vascular plants. Part 1. *Crociphyton*, a new transitional sea-land plant, 355
Anatomy, nodal, of *Ankyropteris glabra* Baxter, A note on the, 379
Anasazi sites, 194; beans found in, 220
Andrews, Henry N.: A new fossil plant from the New Albany shale, with some comments on the origin of land vascular plants. Part 1. *Crociphyton*, a new transitional sea-land plant, 355; Part 2. Some comments on the origin of land vascular plants and the taxonomic position of *Crociphyton*, 363; A note on the nodal anatomy of *Ankyropteris glabra* Baxter, 379
Angiosperms, early record of, 366
Ankyropteris, 379; *corrugata*, 379; *glabra*, 379, 380; *grayi*, 379
Anomly, 13
Archaeological sites: beans found in, 194, 198, 199
Archaeopteris latifolia, 366
Arrhenechthites, 74; *doliocephala*, 79; *haplogyna*, 77; *mastigothrix*, 78; *mixta*, 75; *novoguineensis*, 78; *tomentella*, 74, 75
Astidosperma quadriovulatum, 304
Australasia, Erichthitoid species of *Senecio* in, 57
Australia: climatic regions of, 112; geologic history of, 115
Australian and New Zealand species of *Pittosporum*, 87

B

Baragwanathia, 365
Basketmakers, agriculture of the, 194

Bean types: black-eyed, 190; common, 191, 248; cowpea, 190; kidney, 191; lima, 192, 222, 251; navy, 191; runner, 192, 210; snap, 190; tepary, 192, 214, 251.

Beans, The cultivated, of the prehistoric Southwest, 189

Beans: archaeological materials of, 199; contemporary, 222; distribution of, 189, 214; morphology of, 208; Old and New World compared, 190; seeds, 201, 213, 248, 251; taxonomy of, 189; use and preparation of, 195; charts showing variation in, 229-230

Belcher, Robert O.: A revision of the genus *Erechthites* (Compositae), with inquiries into *Senecio* and *Arrhenechthites*, 1

Blumea tenera, 79

Bryophytes, fossil, 365

C

Cacalia prenanthoides, 30

Callixylon, 366

Cambrian plants, 365

Citharexylum dentatum, 347; *flexuosum*, 347; *molle*, 347; *retusum*, 347

Compositae, *Erechthites*, *Senecio* and *Arrhenechthites*, of the 1

Coniferophytes, evolution of the, 366

Cooper, Robert C.: The Australian and New Zealand species of *Pittosporum*, 87

Cordaito-conifer line, evolution of the, 366

Couma pentaphylla, 314

Crassocephalum valerianae folium, 26

Crociphyton, A new transitional sea-land plant from the New Zealand shale, 355; taxonomic position of, 363

Crociphyton readii, 362, 372-378

Cyrtosiphonia, 279

D

Daylength, effect of, on habit of beans, 197

Devonian-Mississippian shales, fossil flora of,

355

Dissolena, 279

Dodge, Carroll William: Some lichens of tropical Africa. II, *Usnea*, 381

E

Economic uses: of species of *Pittosporum*, 90; of species of *Rauvolfia*, 267
Ejote, 195
Equisetalean plants, 365
Erechthites, 10
Erechthites (Compositae), A revision of the genus, with inquiries into *Senecio* and *Arrhenecithites*, 1; index to species of, 84
Erechthitoid species of Senecio in Australasia, 37; key to, 39
Evolution of land vascular plants, 363

F

Ferns, heterosporous, early occurrence of, 366
Fossil plant, a new, from the New Albany shale, 355

G

Gynura aspera, 20; *malasica*, 20; *papuana*, 53; *rosea*, 26; *zeylanica* var. *malasica*, 20

H

Hohokam culture in the Southwest, 194; beans of the, 219
Hopi beans, 222, 237
Huerckia, 279
Hybridization in Rauvolfia, 264

K

Kaplan, Lawrence: The cultivated beans of the prehistoric Southwest, 189
Kentucky, a new fossil plant from, 355

L

Land vascular plants, origin of, 355, 363
Lichens of tropical Africa. II. *Usnea*, 381
Life forms of Australian and New Zealand species of Pittosporum, 95
Lycopodiaceous plants, early, 365

M

Malouetia jasminoides, 347
Marianthus procumbens, 182
Mesa Verde beans, 251
Mogollon culture in the Southwest, 194; beans of the, 207, 218, 229

N

Navajo beans, 223, 233, 236

Neocoelis, 10; *carduifolia*, 19; *bieracifolia*, 14; *microcephala*, 61; *rigidula*, 14; *tomentosa*, 57

New Albany shale, a new fossil plant from, 355

New Zealand and Australian species of *Pittosporum*, 87

Nodal anatomy of *Ankyropteris glabra* Baxter, 379

O

Ophiioxylon, 279

P

Paleobotany: A new fossil plant from the New Albany shale, with some comments on the origin of land vascular plants, 355; A note on the nodal anatomy of *Ankyropteris glabra* Baxter, 379

Phaseolus, 189; *acutifolius*, 192, var. *latisiliolius*, 192, 206, 207; *coccineus*, 192, 206 207; *lunatus*, 192, 207; *vulgaris*, 191, 206, 207, subsp. *aboriginus*, 191, subsp. *cultigenus*, 191

Phylogeny of *Pittosporum*, 98

Piman beans, 223

Pittosporaceae, distribution of, 108, 109

Pittosporoides, 121; *umbellata*, 147

Pittosporum: Australian and New Zealand species of, 87; interrelations of species of, 117; index of species, 187; index of vernacular names, 187; taxonomy of, 121

Pomaderris microcarpa, 181

Prehistoric Southwest, Cultivated beans of the, 189

Protein, beans as a source of, 196

Prototaxites, 368

Pteridophytes, evolution of, 363

Pteridospermae in Cambrian time, 365

Ptileris bieracifolia, 14

R

Rao, Aragula Sathyanarayana: A revision of *Rauvolfia*, with particular reference to the American species, 253

Rauvolfia: economic uses of, 267; geography, 268; index to species, 353; relationships, 273; variation and hybridization, 264, 266

Rauvolfia serpentina, medicinal use of, 267

Rauvolfia, 279

Rhynia, 363

Rio Grande Pueblo beans, 223, 233

INDEX

399

S

Sanmiguelia lewisi, 366
Schizopodium davidi, 362
 Sea-land plant, a new transitional, 355
 Senecio and Arrhenecithites, Inquiries
 into, 1
 Senecio, Erechtitoid species of, in Australia, 38; index to species, 85
Senecio, 10
 Senecioninae, key to the, 8
 Serpentine, 267
Sonchus agrestis, 19; *brasiliensis*, 19; *erythrophappus*, 26; *laevis*, 13; *occidentalis*, 19
 Southwest, The, 193; culture history of, 194; prehistoric, Cultivated beans of the, 189
Stauropteris burntislandica, 366
Strempeleopsis strempeleoides, 347

T

Tabernaemontana oppositifolia, 347
Tonduzia longifolia, 347
Trichilia monophylla, 134

U

Usnea in Africa south of 15° N., 381; key to, 382; new taxa, 392

Usnea, 381; *amanensis*, 396; *articulata* subsp. *aethiopica*, 394; *blepharoides*, 395; *brunnescens*, 393; *cameroonensis*, 394; *cervicornis*, 392; *Dalei*, 396; *decipiens* var. *Rhodesiana*, 394; *Dodomae*, 392; *Gossweileri*, 395; *isabellina*, 395; *medio-africana*, 393; *Meyeri* var. *chondroclada*, 396; *nana*, 393; *nutans*, 395; *pulvinulata*, 392; *spilotoides*, 396; *suberistata*, 393; *subfoveata*, 395; *terricola*, 394

V

Vallesia dichotoma, 347
 Variation: in cultivated beans, 229-239; in *Rauvolfia*, 264
 Vascular plants, land, origin of, 363
 Verde Valley beans, 229
 Vernacular names of species of *Pittosporum*, 187

X

Xenocladia, 368

Y

Yuman beans, 223

Z

Zuni beans, 222, 236, 238